

OSPREY VANGUARD 11

US 2nd ARMORED DIVISION 1940-45



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Colour plates by
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82
VANGUARD SERIES

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Cover illustration

Mike Chappell's cover painting shows a cast-hull M4A1 Sherman, with 76mm gun and T23 turret, as photographed in Ahlen, Germany, on 31 March 1945 during the last stages of the dash to surround the Ruhr Pocket. Heavily protected with sandbags held in place by chicken-wire screens, the tank displays on detachable tin plates its identification as vehicle 10, Company 'H', 67th Armor, 2nd Armored Division.

Divisional personnel on manoeuvres in 1941, firing an old water-cooled machine gun from the back of an armoured halftrack. Note fatigue caps. (Author's collection)



Formation and Training

The tank was the offensive answer to the machine gun's rule of the battlefields of 1914-18; it was an answer heard, however, by only a handful of American military men during the years that followed the Armistice. While German Army Panzers were rolling over Poland, the American Army were still debating how to use tanks, horsed cavalry and infantry. The cavalry still resisted giving up their horses, but an ever-growing body of American armour enthusiasts were finding their views proved by German victories.

Finally, in June 1940, the American War Department decided to set up two full armoured divisions, completely separate from the cavalrymen and their beloved horses. On 15 July 1940 the 2nd Armored Division, under the command of cavalryman-turned-tanker Brigadier-General Charles L. Scott, was activated at Fort Benning, Georgia. At the start the Division had only 99 officers and 2,202 enlisted men, largely drawn from the 66th Armored Regiment (Light). To reach the required 530 officers and 9,329 enlisted men for such a division, Reserve officers were

called to active duty and enlisted men transferred from other units.

The Division was built around its 2nd Armored Brigade, which had one artillery and three tank regiments. Information was fed to the divisional command, which controlled the brigade, by the 2nd Reconnaissance Battalion (Armored), as well as by the Division's own observation aircraft. Support was given by the Division's infantry regiment, an engineer and an artillery battalion, as well as medical, quartermaster, ordnance and signal units.

The purpose of the armoured division, in American tactical thinking, was explained in Armored Force Field Manual 17-10:

'The rôle of the armored force and its components in the conduct of highly mobile ground warfare is primarily offensive in character, by self-sustained units of great power and mobility composed of specially equipped troops of the required arms and services.' Translated from tortured bureaucratic language into plain English, this meant that armoured units were to have

people with lots of guns who would ride their way through enemy lines.

General Scott amplified the Army view to new officers of the Division shortly after its activation. He explained how the Division was designed to find weak spots in the enemy line, break through them and then spread out to destroy enemy communications and supply lines. The armoured unit would destroy enemy mobility while the infantry would finish them off. The armoured unit's main attribute was surprise, created by its constantly being on the move. Once an enemy was located, the armour would flow around him like water, striking at the flanks or rear.

The Division got under way immediately with serious training, but were hampered by stubborn supply problems. The Division was supposed to be fully battle-ready by 1 October 1940, but actually it was short of 4,297 pistols, 495 M1 rifles, 1,381 sub-machine guns, 120 machine gun mounts for scout cars, fifty-eight .30 cal. machine guns, twenty-three .50 cal. machine guns, and twelve 37mm guns for its M2A4 tanks. In the rush to get the various units operational, a variety of equipment and vehicles had been issued within the same units. For example, on 1 January 1941 the 66th Armored Regiment had not one type of tank but three—and between them the three tanks had as many as seven different engines, some using petrol and others diesel fuel; six different generators; five different starters; and three different voltage regulators. Maintenance was thus difficult at best, and supplies for some vehicles were virtually impossible to obtain.

Clothing was also in short supply. One man received his only uniform, a shirt and a pair of trousers, in Atlanta, Georgia, before joining the Division; he had to wear them for thirty-two days before receiving a change of clothing. Colonel George S. Patton, Jr., at that time the 2nd Armored Brigade commander, was concerned about this, and ordered the unit to be especially sharp in matters of dress. Despite difficulties in clothing supply, however, cavalymen serving in armour were still required to wear breeches and boots. After a while this was admitted to be pretty silly, and the order was revoked. Another dress order, which lasted longer, required the Division's shoulder patch to be worn on the left breast of

all field jackets, while officers were also required to wear the patch on the left breasts of their overalls.

The Division immediately ran into the problem that specialist personnel, who had just been trained, were being transferred out to fill up newly activated units. In April 1941, for example, as many as 687 officers and 4,875 enlisted men were taken out of the Division to make up a new 3rd Armored Division. Apart from all these handicaps, the Division kept on working. It went on a series of large-scale manoeuvres held in the American south, which was rural enough and had fair enough weather to allow large concentrations to move long distances. New equipment was arriving. In the fall of 1941 the Division received 112 halftrack personnel carriers and artillery prime movers, thirty-two M3 medium tanks and forty-three M3 light tanks. The light tanks had Guiberson radial diesel engines, which were, according to one veteran, hard to maintain and start in cold weather, but did have a high power-to-weight ratio. Diesel engines were replaced with petrol-burning ones before going overseas. The engineers received new 500ft pontoon bridges, which were carried in their own lorries, complete with cranes to lift the pontoon boats and steel treadways.

In December 1941 the Division was reorganized. The 702nd Tank Destroyer Battalion, formed from the old Battery 'D', 78th Armored Artillery, was added to the roster. The 66th and 67th Armored Regiments dropped the words (Light) and (Medium) from their designations, while the 14th Field Artillery (Armored) was re-named the 14th Armored Field Artillery Battalion. The 92nd Armored Artillery Battalion was added to the Division, while the 68th Armored Regiment (Light) was deactivated and its equipment shared among other regiments. The 14th Quartermaster and 17th Ordnance Battalions were made into one Maintenance Battalion, 2nd Armored Division. The Division itself was made into a new structure: Division Headquarters, Combat Com-

Fancifully posed propaganda picture which does at least illustrate the summer khaki drill uniform. The binocular case has a compass built into its lid. (This, and all other photographs not specifically attributed, are courtesy US Army)



mand A, Combat Command B, Division Artillery and Division Trains. The latter were responsible for supply and maintenance. After final intensive training in October 1942, the Division set sail for the wars.

Sicilian Beachhead

Following the occupation of French North Africa, Allied planners picked Sicily as the place to hit the Germans and Italians without tying down too many Allied troops or taking too many losses. The basic plan called for an infantry landing, followed by armoured support. The 2nd Armored Division was to follow behind the 1st Infantry Division (see Vanguard 3, *The US 1st Infantry Division*), which was landing on the Gela coast.

D-Day was 10 July; Gela, defended largely by Italians, fell quickly to American Rangers. At about 5pm on D-Day, Combat Command B headquarters landed, and 2nd Division infantrymen started slogging ashore an hour later. By midnight most Combat Command B men were ashore, but high seas made landing vehicles so difficult that the Navy called the operation off. Only two platoons of medium tanks had landed and most of them had got stuck in the beach's soft sand. Still, by morning, four of the tanks were in firing positions along the Gela-Vittoria road, where they were joined by a 105mm self-propelled howitzer. There they spotted some 40 enemy Panzers from the *Fallschirmpanzerdivision 'Hermann Göring'* (see Vanguard 4) headed towards 1st Division lines.

American tanks and howitzers opened fire, but there was so much indirect fire, largely from US Navy ships, that the direct fire went mostly unnoticed. Some half-dozen Panzers reached the road as the three US tanks north of it pulled back, out of ammunition. The one remaining tank and the howitzer, south of the road, caught the Panzers in their fire. One enemy tank was destroyed and the others retired. As both tank and howitzer were now down to four rounds apiece, an officer went to the rear for more ammunition. He later returned without ammunition but with an additional M7 Priest self-

propelled 105mm howitzer from the 16th Infantry Regiment's cannon company.

While this fighting was going on, tanks were being unloaded and rushed to the front without even waiting to be de-waterproofed. Some, however, got their tracks so entangled with the Summerville matting—a type of wire mesh put on the sand to give better traction—that other tanks decided to avoid the matting altogether. Many of these threw one or both tracks in the sand itself. Those tanks which successfully got into action did help drive off the Germans, with the loss of only three men wounded. Two tanks had malfunctions with their main guns while in action. The sergeants commanding the tanks got out, calmly walked around to the front and cleaned out the gun bores—all the time under enemy fire.

By evening the whole 3rd Battalion, 67th Armored Regiment (hereafter written as 3/67th Armored) and eight tanks of Co. 'D', 82nd Reconnaissance Battalion were ashore. By the morning of the 12th all forty-two medium tanks attached to the 1st Infantry Division, and twenty-two medium and twenty-one light tanks under Combat Command B were on dry land.

D-Day saw the Americans just hanging on, but by the 12th they were ready to go into the attack. Co. 'G', 67th Armored was attached to the 16th Infantry, where they helped put three German Tigers and two PzKpfw IVs on fire and disabled another PzKpfw IV. On the 12th they moved forward, but one tank was almost immediately hit and stopped. Four more passed by him, only to run into a German ambush. One Sherman engaged a Tiger at about 100 yards, but was stopped dead. Three other Panzers passed within range of the disabled American tank, which still had a functioning turret. The Sherman's commander got the Panzers in his sights and destroyed them. By evening the Germans, minus six tanks and three other AFVs, fell back.

The position between the 16th and 26th Infantry Regiments was occupied by two companies of the 41st Armored, which knocked out three tanks and a command car during the day's fighting. There they halted until returned to divisional control on 16 July.



Two platoons of Co. 'H', 67th Armored helped capture the Ponte Olivo Airport, which fell by noon 12 July. One tank was put out of action by a land mine, while the others served as artillery supporting the infantrymen. By the evening of 12 July, with the airport's fall and the failure of the German counter-attack, the beach was secure and the invasion well under way towards being a total success.

Breakout in France

After the successful landings at Normandy, the Germans managed to hold the Allies to a standstill among the hedgerows of France. The attack had been stalled, and something had to be done to open up the German lines.

M3 light tank photographed in close-up at Ft. Benning in December 1941. The driver on the right has his armoured flap opened fully, and enjoys a vastly more spacious view of the road than would be the case in AFVs designed with actual combat experience to draw upon! The crew wear the old brown leather 'doughnut' helmets. Turret numbers indicate the commander of Co. 'B'.

The something was to be Operation 'Cobra', a classic blitz attack. The plan called for a massive air bombardment along the St. Lô-Périers road; two infantry divisions would be hurled through the gap which the bombs were expected to provide, and would be followed by two armoured divisions accompanied by a mechanized infantry division. The mechanized infantrymen would drive for Coutances to cut off survivors of the seven German divisions in the area, while the armour would take Avranches and then turn into Brittany. The two infantry divisions chosen



April 1942—a despatch rider of HQ Company, 66th Armor crosses a creek. Note the cloth 'flyer's helmet', the civilian scarf, the chevrons and divisional patch on the M1941 field jacket, and the holstered Thompson gun.

to go through the gap were the 9th and 30th. Wrote Lt.-Gen. Omar Bradley later: 'To make certain the blitz would get off to a fast start, I called on the Big Red One [1st Infantry Division] to pace it. By that time the 1st had 'rested' for more than a month on the quiet Caumont front. There was no problem in the choice of armoured spearheads; we had only two ashore, the veteran 2nd and the 3rd Divisions.'

The 2nd was assigned the task of taking blocking positions at Bréhal, Cérences, Lengronne, St. Denis-le-Gast, Hambye, Villebaudon and Tessy-sur-Vire, where they would prevent trapped German units from rejoining their own troops.

On 25 July the Division moved into its assembly area, and the next day they went into the attack. The saturation bombing had fallen short of its targets in other areas, but in front of the 2nd the 130th *Panzer Lehr* Division had been virtually wiped out and was quickly replaced in line by the 352nd Infantry Regiment. The newcomers were able to offer only light resistance. Bomb craters did more than German troops to slow down the armoured advance. By just after 10.30am the armoured troops were through the German lines.

Learning from air reconnaissance that seven Tiger tanks had been spotted south of St. Gilles, 2/66th Armor called in air support while the tanks drove around a minefield and came into that town from the north-west. The airmen destroyed two of the Panzers, while the tankers took out one Tiger and a self-propelled gun. Short of both tanks and infantry, the Germans tried to stop the Allied armour by artillery alone, but this was unsuccessful, as was a short attempted stand along a stream by the troops available. The first real resistance the Division met was at Canisy. There they came under fire not only from Germans but from American P-47s, which dive-bombed the Division's tanks. Apparently the yellow identification panels and smoke used to mark American positions appeared from the air too similar to the orange ones the Germans were using. American infantry, who rode into action on tank back decks, dismounted at Canisy to scout the enemy. Because the Germans left their motors running while waiting to go into action, the Americans easily found them by sound alone. The Sherman tanks then hit the Panzers on their flanks, minimizing the advantage generally enjoyed by the enemy in armour weight.

By dawn on 27 July, 2/66th Armor was north-east of Le Mesnil Herman, where it engaged enemy tanks and anti-tank guns, losing three of the regiment's Shermans. The 3/66th Armor reached the La Denisière crossroads, against fairly heavy resistance, at about 11am that day.

Secretary of War, Henry L. Stimson, left, talks with a company commander during manoeuvres; Brig.-Gen. George S. Patton looks on. Patton wears the special general's belt, a dust protector round his neck, and the divisional patch on his overalls.



The Division went onto the defensive to prevent German reinforcements from breaking through to their troops trapped by Operation 'Cobra'. On the 28th the Germans hit all along the seven-mile line the Division was holding from Pont Brocard to St. Denis-le-Gast.

At one point the Germans sent fifteen tanks with infantry support against a point held by the 78th Armored Artillery, an infantry company, four tank destroyers and an anti-aircraft section. Two 78th batteries, the anti-aircraft artillery and the TDs opened fire at direct range, while the other 78th battery fired indirect. For the better part of half an hour the Americans poured out a continuous fire until, finally, the Germans pulled back. They left the burnt-out hulls of nine tanks, along with 126 corpses.

The main attack came against the 2/41st Armored Infantry. A force including a tank

battalion from the 2nd SS Panzer Division '*Das Reich*' (see Vanguard 7), the 17th SS Panzer Grenadier Regiment and assorted infantry hit the Americans around midnight. As it turned out, the attackers arrived at the 41st's outposts just as battalion commander Lt.-Col. Wilson D. Coleman was inspecting his lines. The colonel quickly pulled a bazooka from his jeep and put the leading Panzer out of action himself. Then he and his driver raced back to his command post to coordinate the defence.

The overwhelming German force forced the battalion back and the command post was overrun. Colonel Coleman was killed in action. The Germans pressed on, hitting the 3/67th Armored next. It was a battle in which the Americans, for a change, were able to use the defensive potential of hedgerows. Their lines behind the hedgerows were finally broken, however, when a Panzer





April 1942, Ft. Benning—a firing demonstration of the .30 cal. machine gun for visiting Russian officers.

Left:
Manoeuvres in Georgia, April 1942: M3 Lee tanks and, in foreground, an M2 command halftrack mounting a .50 cal. and two water-cooled .30 cal. guns.

crashed through and destroyed all vehicles within range of its guns. With the area luridly illuminated by fiercely burning AFVs and lorries, the Americans fell back. The 3/67th command post was overrun.

The next line was held by the 41st Armored Infantry Regiment (Reinforced). The Division's



May 1944, England: 66th Armor at a marshalling area—officers in foreground have ranking on helmets.

reserve, its ranks were bolstered by survivors from the 2/41st and 3/67th, as well as cooks and clerks from headquarters companies. While most of this line did finally hold, a group of Germans managed to break through and head for St. Denis-le-Gast. That town was held by a tank platoon of the 3/67th Armored, while the 78th Armored Artillery had been moved to nearby Lachappelle. Some Germans got near to the 78th's position, but were easily driven off. Once this attack was stopped, three Priest SP howitzers were sent towards St. Denis-le-Gast to serve as anti-tank weapons in the defence of that town. The column had halted to question some prisoners when vehicles were heard in the darkness coming down the road towards them. The battalion intelligence officer yelled a challenge in German—and received a reply in the same language.

'That ain't American!' yelled a battery commander to his men, and the whole column opened up on the enemy. When the smoke cleared, the Germans had lost ninety men killed, eleven vehicles destroyed and 205 men taken prisoner. The Americans had four dead and seven wounded. The attack failed.

Another German force was hitting a line made up of a tank company, an infantry company, an

engineer platoon and a headquarters company near Grimesnil at about the same time. Sergeant Hulon B. Whittington leapt on the back of one of the American tanks and, shouting orders through the turret, got it into a position from which it destroyed the Panther leading the German attack. As the other Panzers milled about, trying to get around the burning tank completely blocking the road, Sergeant Whittington jumped down and gathered the men of his platoon. Giving that command so rarely heard in twentieth-century warfare, 'Fix bayonets!', the sergeant led his men towards the enemy. Hurling grenades and firing point-blank, the group routed the Germans. Sergeant Whittington received the Medal of Honor for his night's work.

Still the Germans kept coming, trying to work their way around the American positions. At about 3.30pm the defenders called in artillery fire along the front. In the dark the gunners had to adjust their aim by flash, sound and map data only, which could have caused casualties from 'friendly fire'; but their work was successful and the Germans were finally repulsed. The last German attack came through a swamp in an attempt to cut around the American flanks and rear. Tanks beat this attempt off with the loss of some 300 Germans, whose bodies were later found in the swamp.



The Division's rôle in Operation 'Cobra' was a success and the door into France had been opened for George Patton and his Third Army. On 30 July the Division, except for Combat Command A, was pulled out of line to rest and perform maintenance.

Across the Ruhr

The largest tank battle on the Western Front was the drive across the Ruhr River to take the industrial Ruhr and Rhine valleys. It started in October 1944 in dreary, rainy weather which turned fields into soggy morasses, slowing down tanks to speeds of two and three miles an hour—when they could move at all. The Germans had helped nature by strewing the fields the Division would have to cross with anti-tank trenches and minefields. Artillery and mortar fire were zeroed in on virtually every possible corridor of advance in the sector. German defenders in the area the 2nd had to attack included the 9th Panzer, 15th Panzer-Grenadier and 10th SS Panzer Divisions, and some elements were armed with the formidable new PzKpfw VI 'King Tiger' tanks.

The Division's rôle in the attack on the Ruhr would be to spearhead the drive, and then defend

A conference at Combat Command B HQ during manoeuvres in England, March 1944. The anti-aircraft guard mans a .50 cal.; right, a sergeant brings a mapboard up to date.

XIX Corps' left flank. Much depended on weather good enough to permit a massive preparatory air attack on German positions. It was finally clear enough on 16 November, and some 2,392 RAF and USAAF aircraft hit enemy positions just after 11am. The ground attack followed the planes at about 12.45. Combat Command B led the Division on its narrow front, only some two miles wide. The first 1,200 yards of the forward drive were covered in only eight minutes, the last half of the trip under enemy fire, and the edge of Loverich was reached. The Germans there surrendered quickly and within twenty minutes the town was completely in American hands.

The attack then turned towards Puffendorf. During the drive towards that town four Shermans became totally mired in mud and had to be pulled out, while six others lost tracks to landmines. Still, by 4.30pm Puffendorf was completely cleared of Germans.

The next target was Hill 102.6. Another tank became stuck in the mud while approaching the hill, and the rest were stopped by an anti-tank trench; but a gap in the trench was discovered and quickly enlarged by a tank mounting a bull-

dozer blade in front. The Shermans then crossed the trench, and by evening were dug in below the ridge, where their guns could command its crest by fire.

Floerich fell to a force led by a line of Sherman tanks, followed some yards behind by a line of infantry and M5 Stuart light tanks. The enemy fire was directed at the mediums, sparing the light tanks and infantry as a result. American artillery fire kept the Germans pinned down, and within two hours the town was taken.

The troops then moved on towards Apweiler, where the joy-ride came to a sharp halt. There the Germans let them come on to within 300 yards before opening up with deadly effect with 88mm guns. Within three minutes three tanks were destroyed and four others put out of action. The Americans fell back and set up defensive lines beyond Floerich. The final objective of the day, the town of Immendorf, only 2,000 yards from initial American start-lines, was taken by 1.30pm under heavy artillery and mortar fire.

Unfortunately, while the 2nd Armored took all their assigned objectives, divisions on their flanks failed to move along with them, and as a result the 2nd was left exposed to fire on both flanks as well as the front. Re-supply was difficult with the entire area under enemy artillery fire.

However, the Division continued their attack on 17 November in an attempt to enlarge their holdings. The next target was Geronseweiler, which would give the Division a command of Linnich some 3,500 yards away. The attack began at about 8am, with the 1/67th and 2/67th Armor moving out in line. Hardly had they formed into line when a force of some twenty Panzers with infantry and artillery support moved towards them, firing as they came. The Panzers, heavier armoured and better armed, began to destroy Shermans left and right. The Americans fell back to Puffendorf, where they could use the stone walls as additional armour. The victorious Germans chose not to follow them into the town. The Americans had lost virtually all of two medium and one light tank companies to superior German armour. Other American attacks towards Apweiler were also beaten off, and the Americans themselves stood off a determined 9th Panzer Division counter-attack.

Meanwhile, Combat Command A sent a task force to attack Ederen on Combat Command B's right flank. The attack was ready at 9am, but when Combat Command B's troops fell back, it was halted. At about 11am, however, it was ordered forward. Immediately it ran into a tank trench with some fifteen enemy tanks dug in on the other side. The attack was stopped dead. The day had ended in total failure, without the gain of any ground at all. Some twenty-two medium and seven light tanks had been totally lost, while another sixteen medium and twelve light tanks were out of action, awaiting repairs.

The next day infantry without tank support were sent towards Immendorf, while an armoured company drove towards a slight rise near the town. By 3.15pm, an hour and fifteen minutes after the attack began, the town had fallen, and forty-five minutes later a tank destroyer and an infantry battalion arrived to dig in and take defensive positions. Towards evening two infantry companies, accompanied by a tank platoon from Co. 'I', 67th Armor, headed towards the ridge east of Floerich, meeting little opposition. By dark the ridge was securely in American hands. The same day German positions in Apweiler, which had stood off an armoured attack on the 16th, fell to determined infantrymen.

On 19 November the Germans counter-attacked at Apweiler, now held by troops from Combat Command B. Nine tanks from the 9th Panzer Division were destroyed and the attack failed. On that same day Combat Command A headed across the tank trench which had stopped them a day earlier. As they came across, the Germans sent infantry supported by four Panzers to hit the Command's flank. Seeing the Germans come out of their dug-in positions, Combat Command B troops in Puffendorf opened fire, catching the Germans in the flank instead of the other way around. Three Panzers were quickly knocked out and the rest, along with the infantry, fell back.

Even so, accurate and heavy enemy fire held Combat Command A's gains to a minimum. By evening they were only dug in on the banks of the trench. At Setterich, however, on the tank trench's flank, infantrymen from the 29th Infantry Division breached the trench. Following this



breakthrough, Combat Command A crossed the trench and drove through a gap discovered in a minefield. The Germans continued to dispute every inch of ground. The Americans had gained ground but were still a thousand yards from their objective on the otherside of the trench, Freialdenhoven, when they finally dug in for the night.

Rain started again the next day, 20 November. The Division's advance was resumed, supported by an attached force of British flamethrower tanks from 'B' Squadron, Fife and Forfar Yeomanry. Facing them were some seventy Tiger and Panther tanks which were coming in for a counter-attack. The combined British-American force stood them off, many of the Panzers falling to the gomm guns of the newly arrived M36 tank destroyers.

Combat Command B, also supported by flamethrowing Churchill Crocodiles, ran into a minefield, which halted them only slightly longer

July 1944, near Canisy, Normandy: men of the Division's armoured engineer battalion clear a path for advancing tanks, wearing the short-lived issue of camouflaged field uniform.

than the rain. With the mines removed or charted, the command drove on. Three British tanks were lost to mines, while another stuck fast in a muddy ditch, but they had done their jobs. Germans surrendered quickly to the flamethrowers, and by night the troops had their objectives secure.

One task force from Combat Command A had Ederen assigned as its objective for 20 November: the same one it had had for some days now. Despite the heavy rains, which caused knee-deep mud, the tanks moved out. A tank destroyer and five Shermans were already out of action when a stray shell hit a haystack. The sodden hay laid a heavy haze of smoke across the field instead of simply burning. The German defenders were



Shermans and infantry of the 2nd Armored Division in the Normandy bocage; the censor has unfortunately deleted the unit codes on the nearest tank.

blinded until Sherman tanks suddenly emerged from the screen to round up German infantry. Mostly due to this lucky stroke, by 5.30pm tanks from two companies were safely in the secured town of Ederen.

A similar lucky stroke aided the troops attacking Geronsweller. A tank shell, bouncing off the superior armour of a Panzer, hit an oil dump. The billowing black smoke made an effective smoke screen, and the infantry went in; by 2pm the town was in American hands.

Rain continued to fall all night, and it was after a miserable few hours in fresh foxholes that the Division's infantry resumed their advance on the 21st. Part of Combat Command B took ground north of Geronsweller, meeting mostly opposition from artillery. Once there they dug in and fought off two counter-attacks. Another Combat Command B task force took Hills 96.3 and 95, digging in until relieved. The third Combat Command B task force ran into three companies of the 11th Panzer-Grenadier Regiment. The Germans shouted that they surrendered, raising white flags at the same time. As the Americans approached, the Germans dived for their foxholes and opened fire with a rain of

grenades, *Panzerfausts* and small-arms fire. Two infantry platoons were virtually wiped out as the Germans then charged the wavering Americans. Only the arrival of tanks and tank destroyers stopped the Germans and restored the line.

The Division then dug in under orders to halt in line at least until 23 November. On 24 November the Division returned to the attack, aiming at Merzenhausen. Two battalions, again headed by British flamethrowing tanks, led the attack. Initially the flamethrowers did a magnificent job, but as they reached the town's edge they were all destroyed, and the fight became a typical infantry-armour combined arms attack. By 5.30pm the Americans held about a third of the town, but were then pushed back by a German counter-attack.

The next morning the attack was resumed. A Panzer hidden in a barn destroyed one American tank, but was itself destroyed by avengers armed with Molotov cocktails and bazookas who set the barn on fire. It was a slow, bloody, yard-by-yard fight, but by 3pm the Americans held almost half the town.

On 27 November yet another drive was made to secure the town finally. The first attack was made by unsupported infantry who fought their way through the town, even standing off an

enemy Panzer counter-attack. Tanks went to their support then, going through the town itself. The basic tactics of the fight were simple enough—one squad covered with fire, while the second rushed the house and killed any occupants who still resisted. It was slow work. Panzers were hidden in some of the houses; in one such case an 8in howitzer was brought up to deal with it. Firing point-black, the giant gun virtually destroyed the house as well as the lurking Panzer with just two rounds. By evening the Americans held the whole town and stood off a counter-attack at around 9.30pm.

With the fall of Merzenhausen and the hills around it, Barmen, the Division's main objective, was ripe for the plucking. On 28 November it fell to the GIs in a brisk attack.

Losses for this campaign, called Operation 'Queen', were heavy. Some 203 men were killed,

1,104 wounded and 198 missing, as well as 80 tanks damaged, 41 of them beyond repair. The Division captured 2,385 men and destroyed 86 Panzers, 12 SP guns and 113 other vehicles.

Counter-attack in the Ardennes

At the end of 1944 the German High Command gambled on a massive offensive to split the British and American forces, drive the British off the Continent and win the war in the west. This 'Battle of the Bulge' caught the Allies unprepared,

A brand-new 76mm Sherman M4A1 of the 67th Armored Rgt. enters the Norman village of St. Sever Calvados, August 1944. Note that the crew wear steel helmets.



and the Germans initially made dramatic local advances; but once the first shock was over, and superior Allied numbers and logistics were brought to bear, the enemy was blocked and thrown back with heavy losses.

Shortly after the Allies got some idea of the scope of the enemy attack, the 2nd Division was alerted for action. On Christmas Day 1944 the Division was ordered to attack: Combat Command A, with the 4th Cavalry Group, was to take Humain, and Combat Command B was to take Celles. Celles was held, oddly enough, by the German 2nd Panzer Division. Celles itself lay in a valley with ridges rising on either side of it. Combat Command B moved along both ridges, Task Force A with the 3/67th Armored on the right, and Task Force B with the 1/67th Armored on the left.

T/5 Melvin Grayson, 4th Cavalry Group, had a bird's-eye view of the action from his vantage point in a nearby church steeple:

'It reminded me of the movie *Desert Victory*, which was about Montgomery's attack on the Afrika Korps at Alamein. We saw the 2nd Armored tanks move out at about 8am. They took right off across the fields toward a wooded ridge line to the south, where we could see the German tanks milling about. The 2nd Armored tanks opened up all at once, and then the artillery behind them, and then P-47s and P-51s began to dive-bomb the ridge line.

'The noise was like the end of the world. The German tanks disappeared in the smoke and all we could see was their muzzle flashes. Then there were a lot of big explosions on the ridge—I guess we had hit their ammunition dumps—and the whole damn woods disappeared in the smoke. The Krauts were still firing, though. Every once in a while I'd see an American tank get hit and go up in flames, with the guys scrambling out of it, their clothes on fire.

'By eleven o'clock it was all over. The last of the 2nd Armored tanks disappeared over the ridge and we didn't hear much firing after that. We must have beaten the **** out of that Second Panzer.' Ten German tanks, two anti-tank guns and 48 other vehicles had been destroyed in this short, classic armour-air attack.

Drive to the Rhine

After the Ardennes failure, the enemy dug in behind the Ruhr River. The flat, ideal tank-operating country was strewn with defences—anti-tank trenches, 88mm gun positions, pill-boxes and dug-in infantry. The Nord Canal ran through the area. XIX Corps was given the job of clearing a way through this belt. Their plan called for an infantry attack if resistance was strong, armoured thrust if it was weak, provided by the 2nd Armored Division. Initial contact indicated that the Germans didn't have their hearts in the defence, and on 27 February the 2nd was sent in to open the gap.

The attack began at 7am; dozens of small towns fell quickly, as the US armour left pockets of resistance behind for the infantry to clean up. By mid-afternoon the Germans began to make stronger stands, and the speed of the advance was cut; but by nightfall the Division had pushed about nine miles into German-held territory, losing only a couple of tanks while taking dozens of prisoners. The advance had been so rapid that the artillery had to move right along with the troops it was supposed to support. At times, indeed, the artillery was ahead of infantry and armour, and drove the enemy out of their positions alone. The 92nd Armored Artillery Battalion, for example, engaged and captured a German artillery battery all by itself on this drive.

Advances of this kind tend to leave exposed flanks, and the Germans tried to take advantage of this. They launched a counter-attack towards the rear of Combat Command B. The Division was moving ahead so quickly that just about all the tanks available to oppose the German Panzers were from the Division's maintenance battalion. Air support was called in and the maintenance tanks, aided by five flights of fighter-bombers, drove off the Germans. A number of burnt-out Panzers were left behind.

There was to be no rest for the weary. On the night of 28 February Combat Command A was ordered to go on and cross the Nord Canal. By just after 8pm the tankers had taken their first objective, Weilerholfe. They moved on, first coming under fire from the defenders of the canal



An American Red Cross official meets German officers to discuss prisoner exchange; Fernic, France, November 1944. The ARC official wears a plain dark green uniform with black buttons and ARC insignia on the collar, cut like an Army officer's tunic.



Tessy-sur-Vire, France, August 1944: an M5 light tank (left) and an M10 tank destroyer (right) in defensive positions. Note heavy external stowage.

at about 10pm. The Germans held them at first, but two companies from the 66th, using the new M24 Chaffee tanks, plunged across a bridge and drove them off.

The next morning the attack was resumed. Under smoke cover, the 3/66th Armor captured the road crossing at Kleinenbroich, then moved on to take the bridge near Eikerend. By 11.30am the first American AFVs were across that bridge and in action. The towns of Schiefbahn, Willich-Deppeskreuz and Mooscheide had also fallen to the tanks before the Division dug in for the night. Heavy rain on the 30th slowed down the Division's advance, turning the ground into a sea of mud; and it was in these miserable conditions that a small, savage attack hit the Division near Schiefbahn early that evening. The attack was a desperate attempt to escape made by a roughly battalion-sized group of infantry along with a handful of Panzers from the 130th *Panzer Lehr* Division, which had been cut off by the rapid American advance. The attack succeeded in destroying five tanks and three halftracks, but failed to break through American lines, and soon pulled back.

Even while this attack was being beaten off, Division headquarters received orders to press ahead and try to capture an intact bridge across the Rhine. At 1.30am Combat Command A, following these orders, began to move towards Fischeln. The Germans, hidden in virtually every

basement in the town, put up a house-to-house defence. Reinforcements were sent in and the town fell by noon.

By 3 March the Division was in position near the Uerdigen Bridge. The tanks moved forward, two platoons abreast, with infantry riding the decks. Another tank platoon followed leading a halftrack platoon of infantry, and tank destroyers moved up on the flanks. The line, known to tankers as a 'big-ass bird formation', advanced until German '88' fire knocked out two tanks; the infantry then dismounted and moved forward to neutralize the enemy guns. The Germans, well dug in, held them off while they knocked out seven more tanks. Neither infantry nor armour could make any progress, and the force dug in for the night.

In the meantime, the area round the Uerdigen Bridge was constantly shelled, to try to prevent the Germans from preparing it for demolition. A ferryboat was sunk by accident, and two locomotives on the other side of the Rhine were blown up as well.

At 8am, despite bitter enemy resistance, American tanks reached the bridge approaches. Just at that time, however, elements of the German First Parachute Army arrived at the scene. The tough paratroopers held onto every foot of ground stubbornly, and it wasn't until 5.30 that afternoon that the approaches were finally cleared completely. Infantrymen dashed forward onto the bridge—only to find that the span had been too knocked around in the fighting to take the weight of tanks. They withdrew to await



engineers; and at around 8.15pm the Germans touched off explosives hidden near the bridge which blew a thirteen-foot-wide crater at its west end. An infantry patrol went back onto the bridge, under cover of clouds which hid the moon, and was unable to find any other charges. At a little before 4am on 4 March the 2/379th Infantry was ordered forward to capture the bridge once and for all. Their point patrol reported that the structure had now been battered to the extent that it was unsafe for use even by infantry. This news was being digested when, at around 7am, the persistent German engineers finally managed to blow up the centre span. The drive to capture an intact Rhine bridge had failed.

Aubenchaul-au-Bac, September 1944: French civilians push abandoned German transport out of the path of 76mm Shermans of Co. 'D', 66th Armored.

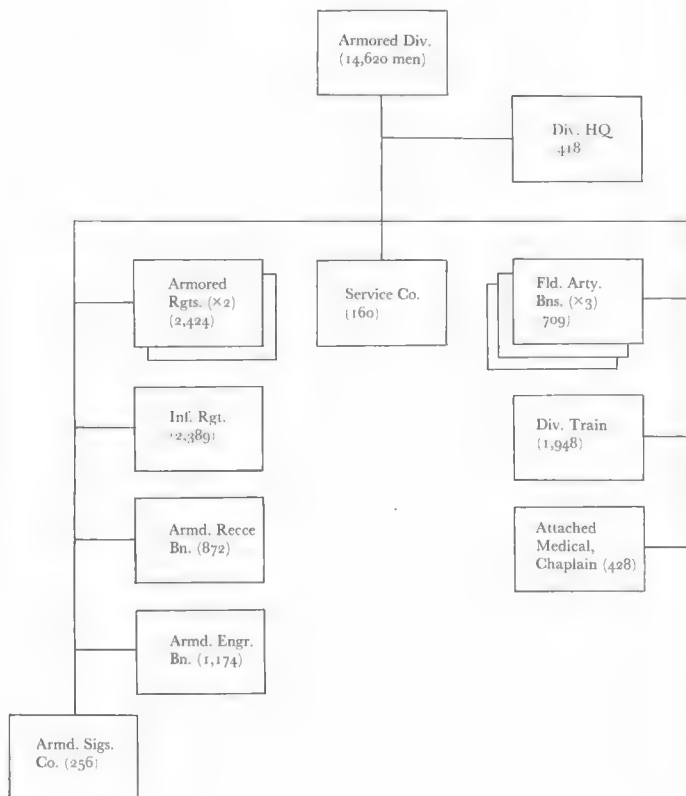
Chronology

The main events in the service of the Division during the Second World War may be summarized as follows:

- 14 July 1940 Division activated at Ft. Benning, Georgia
- 12 Dec. 1940 Training march to Panama City, Florida
- June 1941 Participation in Tennessee Manoeuvres
- Aug. 1941 Participation in Louisiana Manoeuvres
- Nov. 1941 Participation in manoeuvres in the Carolinas

- Aug. 1942 Assigned to Ft. Bragg, North Carolina
- Nov. 1942 North African landings; elements of Division first came under fire at Port Lyautey on 9 November. Division assigned to guard Spanish/French Moroccan border
- Nov. 1942–Jan. 1943 Companies 'G' and 'H', 67th Armor, assigned to British 78th Div. at Beja, Tunisia
- 23 June 1943 Division inspected by HM King George VI and Lt.-Gen. Dwight D. Eisenhower
- 6 July 1943 Division sailed from Bizerta for invasion of Sicily
- 10 July 1943 Division lands at Gela, Sicily; attached to 1st Infantry Div.
- 16 July 1943 At rest camp, Campobello
- 20 July 1943 Division captures Ribera
- 22 July 1943 Division captures garrison city of Palermo. Total losses in Sicily: 56 killed, 250 wounded, 5 captured, 32 missing. Total enemy captured, 16,199. Division takes over military government of western region of Sicily
- 1 Nov. 1943 First divisional troops sail from Capaci

US Armored Division Organization
1 March 1942



- | | | | |
|-----------------|---|-----------------|---|
| 8 Nov. 1943 | First divisional troops land at Liverpool, England. In camp at Tidworth Barracks, Salisbury Plain | 19-26 June 1944 | Combat Command A returned to divisional control; in reserve |
| 23 March 1944 | Reviewed by Gen. Eisenhower | 30 June 1944 | Division relieves British 7th Armoured Div. east of Caumont |
| 11-14 June 1944 | Combat Commands A and B and Divisional HQ land on Omaha Beach, Normandy | 18 July 1944 | Relieved in turn by 8th Armoured Brigade from British 50th Div. |
| 12 June 1944 | Combat Command A sent to support 101st Airborne Div. at Carentan* | | |

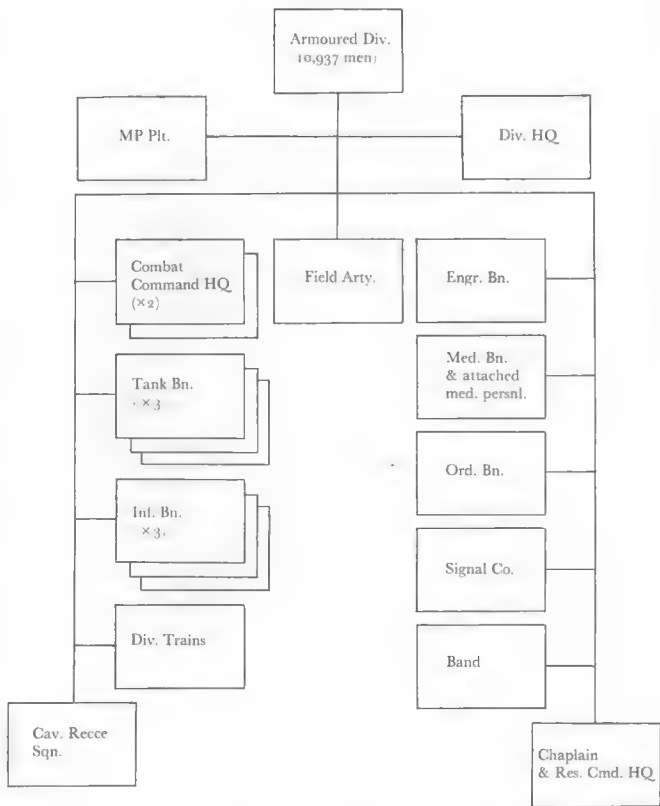
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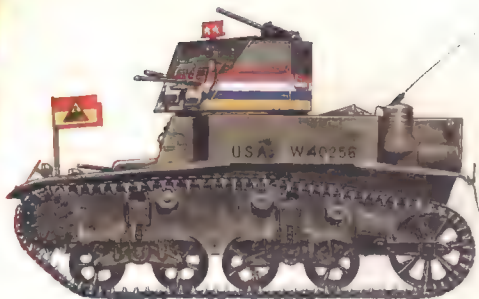
*See Vanguard 5 'US 101st Airborne Division'

Framed by centuries-old stonework, a Sherman of Co. 'F', 66th Armored rolls through Valkenberg, Holland, in September 1944.



US Armored Division Organization
15 September 1943





(Above) M1A1 command vehicle, Maj. - Gen. Patton, OC 2nd Armored Div.; Tennessee Manoeuvres, June 1941. (Below) M2A4 tank of Co. 'H' commander, 66th Armored Rgt.; Tennessee Manoeuvres.





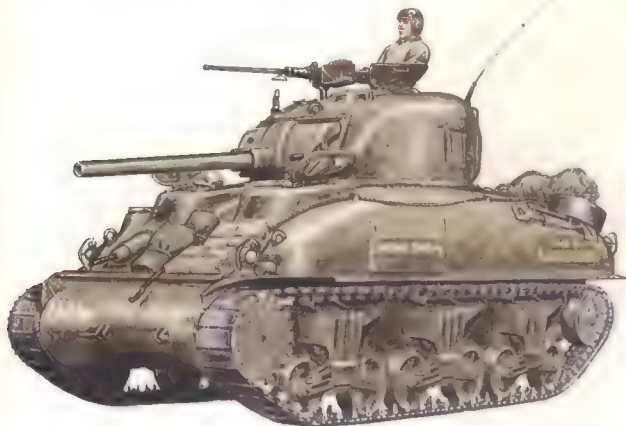
(Above) M2 halftrack, 67th Armored Rgt.: Sicily, July 1943

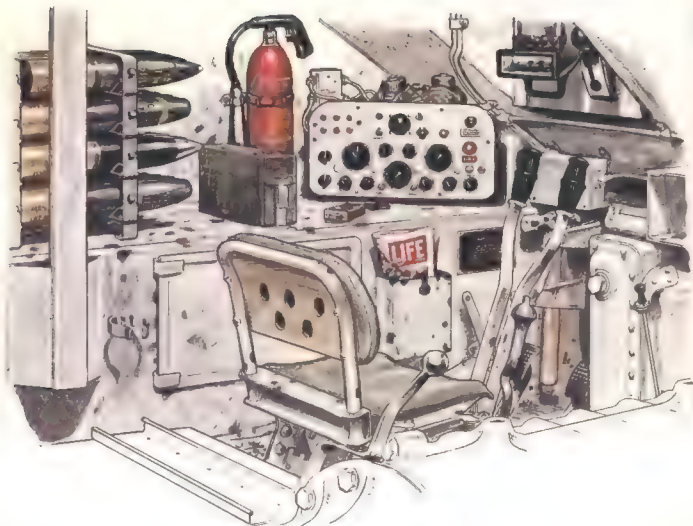
(Below) M8 armoured car, Co. 'C', 82nd Recce Bn.:
Normandy, July 1944



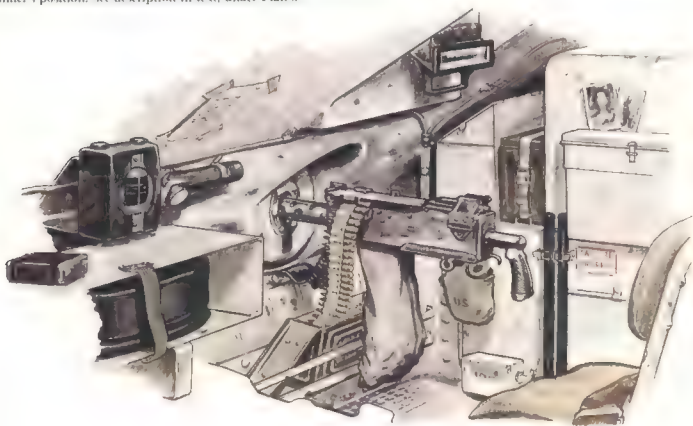


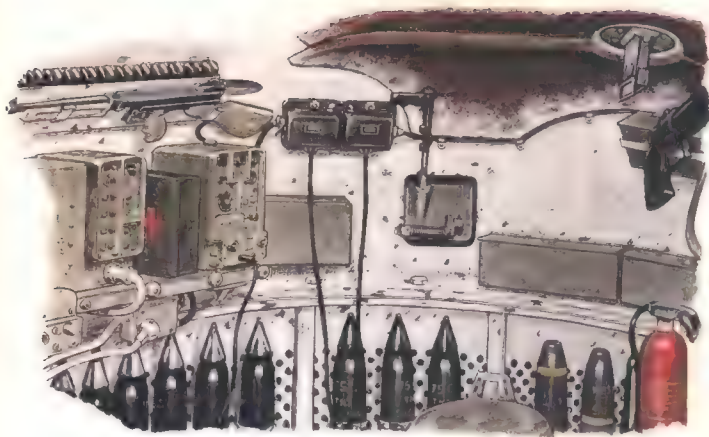
(Above) 76mm M4A1 Sherman, Co. 'C', 67th Armored Rgt.: NW Europe, winter 1944
 (Below) 75mm M4A1 Sherman, Co. 'D', 67th Armored Rgt.: Ubach, Germany, November 1944



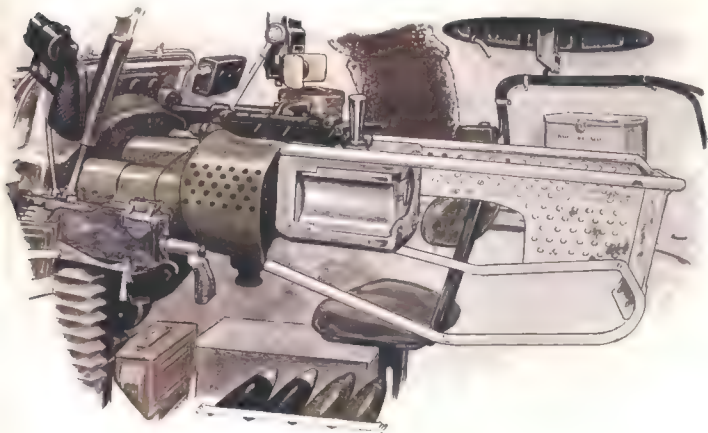


(Above) M4A3 Sherman, interior of driver's position: (below) (co-driver hull gunner's position. See description in text, under Plates.

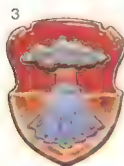




(Above) M4A2 Sherman, left and rear interior of turret; (below) right and front of turret. See description in text, under Plates.



Major-General George S. Patton, OC 2nd Armored Division: Tennessee Manoeuvres, June 1941. (Below) Regimental crests: (1) 41st Infantry (2) 66th Armor (3) 67th Armor (4) 14th Artillery (5) 78th Artillery (6) 92nd Artillery



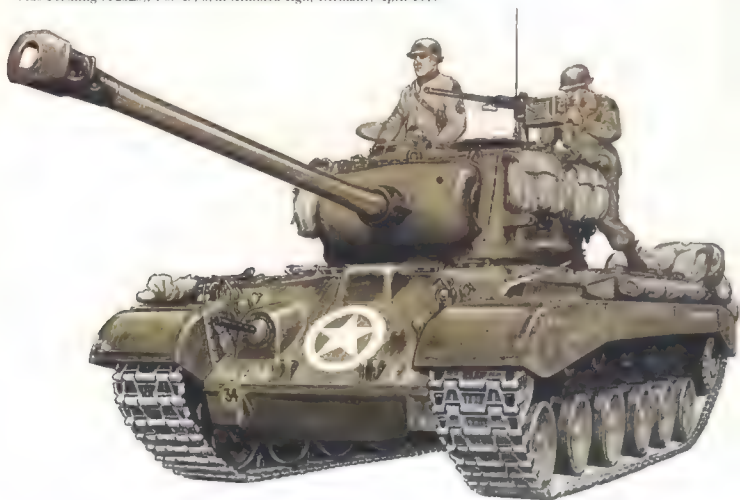
- 1 Corporal, 41st Infantry; Krefeld, Germany, March 1945
2 Private first class, 66th Armor; Germany, winter 1944-45
3 Private, 17th Armored Engineer Bn.; Normandy, July 1944



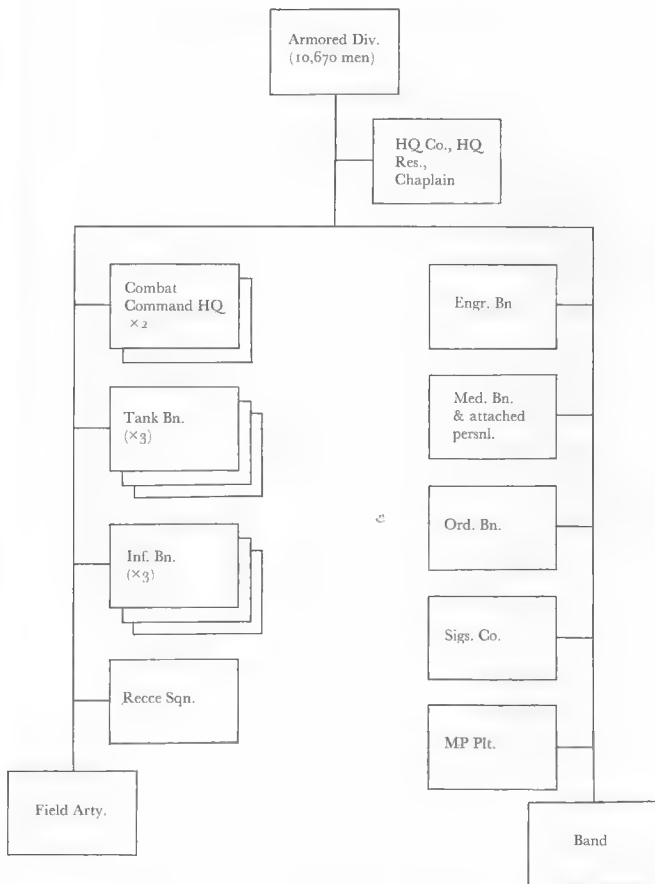
M24 Chaffee, Co. 'A', 2 Bn. 66th Armored Rgt.; Germany, February 1945



M26 Pershing (T26E3), Co. 'E', 67th Armored Rgt.; Germany, April 1945



US Armored Division Organization
16 June 1945





A jeep enters the shell-torn rubble of Houffalize, Belgium, retaken from the Germans during the closing stages of the Battle of the Bulge, January 1945.

25 July 1944	Operation 'Cobra'; on protective line on east flank: Combat Command A under tactical command of 29th Infantry Div.	17 Sept. 1944	Co. 'F', 67th Armor, are first Division troops to occupy German soil, at Wehr
7 Aug. 1944	In reserve near Vire, except for 1/66th and 3/66th Armor, which were attached to 29th Div.	2 Oct. 1944	Crossing of Wurm behind 30th Infantry Div. in attack to break through the 'Westwall'
14-15 Aug. 1944	In bivouac near Barenton	16 Oct. 1944	Elements of Division help close Allied ring around Aachen
18 Aug. 1944	Sent to cross Seine	16 Nov. 1944	Operation 'Queen', an attack on Ruhr River
19 Aug. 1944	Captures river crossings at Elbeuf; sent to assembly area near Mantes-Gassicourt	29 Nov. 1944	In defence along Ruhr River
29 Aug. 1944	Crossing of Seine and Somme rivers	20 Dec. 1944	Relieved by 29th Infantry Div.; Division moves to positions east of Wurm River as Ninth Army reserves
1 Sept. 1944	Spearheads attack towards Ghent	21 Dec. 1944	Division moved to Modave, Belgium, in reaction to German offensive in Ardennes
3 Sept. 1944	Tournai falls to British Guards Armoured Div.; 2nd Division, short of fuel, remains in area	28 Dec. 1944	Relieved, for rest and maintenance
6 Sept. 1944	In assembly areas south of Brussels	3 Jan. 1945	Division attacks along River l'Ourthe
11 Sept. 1944	Co. 'A', 82nd Reconnaissance Bn., crosses Albert Canal at head of Division	16 Jan. 1945	Division captures Houffalize on the l'Ourthe; links up with Third Army
16 Sept. 1944	Combat Command B reaches Dutch border	19 Jan. 1945	Relieved by 4th Cavalry Group; moves to new assembly area near Spirmont, Belgium

- | | | | |
|---------------|--|---------------|---|
| 4 Feb. 1945 | Moves to area around Margrat and Gulpen, Holland | 1 April 1945 | Combat Command B meets 3rd Armored Div. at Lippstadt, sealing Ruhr Pocket; relieved by 30th Infantry Div. |
| 25 Feb. 1945 | Combat Command B attached to 30th Infantry Div. for attack on Ruhr River | 8 April 1945 | Combat Command A crosses Zweig Canal west of Harsum; Combat Command B takes pass near Bodenstein and crossing over the Innerste near Baddeckenstadt |
| 28 Feb. 1945 | Reunited Division attacks along River Erft, taking Elfigen, Hemmerden, Priestrath, Herberath and Scherfhausen, Germany, in a drive to the Nord Canal | 10 April 1945 | Division reaches the Elbe |
| 1 March 1945 | Division sent to take Uerdigen Bridge across Rhine | 20 April 1945 | Moves to positions near Wolfenbittel, Immendorf and Braunschweig |
| 4 March 1945 | Uerdigen Bridge blown before it can be captured | | |
| 5 March 1945 | Division relieved by 95th Infantry Div. | | |
| 29 March 1945 | Division seizes bridge over Dortmund-Ems Canal | | |

The miseries of open-topped vehicles in winter warfare . . . the crew of a mortar halftrack go into action near Amonines, Belgium, January 1945. Note unit and vehicle markings on hull side; and the fact that the crew wear their divisional shoulder patches in action, on the left sleeve on the M1941 jackets.





Men of Co. 'B', 67th Armored, examine a knocked-out Panther near Grandmenil, Belgium, January 1945.

12 May 1945 Sent to staging area
1 July 1945 Division begins occupation duties in Berlin

Commanding officers of the 2nd Armored Division

15 July–3 Nov. 1940: Major-General
Charles L. Scott
3 Nov. 1940–
18 Jan. 1942: Major-General
George S. Patton Jr.
18 Jan. 1942–
31 July 1942: Major-General
Willis D. Crittenger
31 July 1942–
6 April 1943: Brigadier-General
Ernest N. Harmon
6 April 1943–
5 May 1943: Brigadier-General
Allen F. Kingman

5 May 1943 Major-General
17 March 1944: Hugh J. Gaffey
17 March 1944–
12 Sept. 1944: Major-General
Edward H. Brooks
12 Sept. 1944–
19 Jan. 1945: Major-General
Ernest N. Harmon
19 Jan. 1945–
8 June 1945: Major-General
I. D. White

Tanks in Action

Although light tanks remained on the Division's strength in a reconnaissance rôle, the mainstay of the two tank regiments from mid-1942, when it replaced the M3 Lee, was the M4 Sherman. Various slightly differing models of the Sherman were in service side by side. In early June 1944 the new 76mm gun version was first demonstrated

to tank officers in the European Theatre. Although impressed by the new Sherman, they were loath to give up the tried and tested 75mm gun. This conservative approach was not shared by troops in the field, who were eager to lay their hands on the new gun. Although it was originally intended to form complete battalions of the Shermans with the new T23 turret, they were in fact fed into the line as and when they became available: commanders were anxious to give each sub-unit at least some of the hard-hitting 76mm guns to counter the known superiority of the German tanks. As more Shermans became available, either built from the ground up or retro-fitted with the T23 turrets, the proportion rose in the sabre squadrons, but by the end of the war approximately half the M4s in service were 76mm models.

The new gun was essential when fighting the

later German tanks. According to Gen. Omar Bradley, 'Only by swarming around the Panzers to hit them on the flank could our Shermans knock the enemy out. But too often the American tankers complained it cost them a tank or two, *with crews*, to get the German. Thus we could defeat the enemy's Panzers but only by expending more tanks than we cared to lose. Ordnance thereafter replaced the antedated 75 [*sic*] with a new 76mm high-velocity gun. But even this new weapon often scuffed rather than penetrated the enemy's armor.'

A typical action illustrating this state of affairs involved Co. 'H', 66th Armor during the fighting

Even a heavy, broad vehicle like this M10 could spin off the road and overturn in the icy conditions of January 1945. Note the heavy layer of logs lashed on its nose and beneath the gun.





Men of the 92nd Field Artillery warm up near their camouflaged M7A1 105mm 'Priest' SP howitzer near Les Tailles, Belgium, January 1945.

of August 1944. Running across three PzKpfw V Panther tanks, the American company advanced a Sherman behind a smokescreen to a range of about 200 yards. From that range it fired three armour-piercing rounds in quick succession, only to see all three bounce harmlessly off the Panther's side. The Panther's first round in retaliation penetrated the Sherman turret, killing one crewman and wounding the commander. In desperation the Sherman commander charged the Panther, firing alternate smoke and APC rounds, and supported by the rest of his platoon. The Panthers, apparently startled, fell back—but the action had been won by nerve rather than hardware.

'For the remainder of the war,' Gen. Bradley wrote later, 'our tank superiority devolved primarily from a superiority in the number rather than the quality of the tanks we sent into battle.'

A number of tactics were tried out in an attempt to compensate for this inferiority of equipment. In October 1944, the Division's Combat Command B was trying to advance to the main highway between Duren and Geilenkirchen in Germany; the enemy was defending the line with anti-tank guns and with Panther and Tiger tanks. The American attack was textbook: a rolling artillery barrage followed by a line of Shermans, followed in their turn by infantry. Unfortunately, the barrage failed to break the German defence, and the Panzers' steady fire knocked out the

Shermans one by one. In short order 63 per cent of the American tank force was put out of action, for minimal German losses.

At this point some bright officer—possibly an old cavalryman?—came up with a suggestion. Why not dash light tanks across the field at high speed, instead of the slower mediums? Accordingly Co. 'C', 67th Armor, which was still equipped with M5 light tanks armed with a puny 37mm gun, was put into the line. Opening up to top speed, the Stuarts charged the German lines at around 35mph. The enemy proved unable to track their turrets fast enough to hit the small, fast targets before the M5s were in among them. Shermans and infantry followed, profiting by the confusion sown as Co. 'C' rampaged through the German artillery, anti-tank and infantry positions. Three of the M5s which fell foul of anti-tank ditches were destroyed, but the rest ran rings around the ponderous PzKpfw VIs. The shaken defenders fell back, and by early afternoon Combat Command B was firmly in control of Waurichen.

Another way of overcoming the advantages enjoyed by the Panzers was by using tank destroyers, with their heavy armament, right up alongside the tanks. First used in North Africa, this tactic was later employed wherever possible. The new M36 Hellcats received in November 1944 by the 702nd Tank Destroyer Bn. were used most effectively. When checked by the fire of heavier German tanks, the Shermans would try to draw the enemy after them by falling back in apparent panic, until the Tigers and Panthers came within range of concealed M36s with their powerful 90mm guns.*

The obvious answer, of course, was a heavier gun for the Sherman; but none was available. The British made most effective use of their 17pdr. anti-tank gun mounted in Sherman turrets—the renowned Firefly, which could stop cold most German armour at battle ranges. Bradley requested an allocation of Fireflies from British sources, enough to equip each US platoon with one; but Montgomery had to report that British requirements were already overloading their Ordnance, and indeed it was to be very late in

*See Vanguard 10, 'Allied Tank Destroyers'

the war before more than one Firefly per troop was generally to be seen in British tank regiments.

Apart from using initiative in tactics to overcome German tank superiority, the personnel of the Division often applied unorthodox methods to increase their firepower. 'Moonlight requisitions', the universal reply of the combat soldier to bureaucratic obstruction, had been practised by the Division since its activation, and were raised to a fine art when overseas. Before D-Day a lieutenant who had served with the Army Air Corps before joining the Division changed the machine guns mounted on the jeeps of the 82nd Reconnaissance Battalion's Co. 'C' by direct action. The men of Charlie Company felt that the issued .30 cal. weapons were uncomfortably light for the situations in which their advanced rôle sometimes landed them. Donning his old Air Corps uniform, the lieutenant called upon a

nearby Royal Air Force base, presumably the home of a Mustang unit, and by telling a heart-rending tale about his 'squadron's' plight managed to draw ten .50 cal. guns and 150,000 rounds of ammunition from RAF stores! Ordnance men quickly fitted a field mount devised by the same resourceful officer. The increased firepower was so obviously desirable that a benign blindness to this unauthorized modification afflicted battalion and divisional command levels; and the example of Co. 'C' was followed, in various ways, by several other units before the invasion of Europe. The hunt for 'big fifties' went on after D-Day. The crash of an Allied aircraft in the vicinity always brought out a swarm of souvenir-hunters and scroungers from nearby units; and it was the

A machine gun crew and their infantry squad from headquarters, 1st Infantry follow a Sherman up a hill during an assault on German positions near Ubach.





Jeeps and M5s of the 38th Cavalry Recon Group (Mech.) parked in Altenahr, Germany, March 1945. Note the massive amount of exterior stowage which virtually buries the M5s, and the interesting 'field fix' armoured windshield on one jeep.

machine guns which interested the sharp-eyed jeep crews of the 2nd Division. It seems that a majority of the Division's jeeps acquired .50 cal. guns by the autumn of 1944.

A well-known modification adopted in Normandy was the 'rhinoceros' or 'Culin Hedge-cutter'. In order to enable tanks to break through the centuries-old banked hedges of the *bocage* country without exposing their vulnerable lower hulls to the enemy anti-tank teams which infested these perfect defensive barriers, Sgt. Curtis G. Culin of the 102nd Cavalry Reconnaissance Squadron devised a system of massive prongs, easily cut from girders and sheet metal and welded to the nose of the tank, which allowed the Sherman to uproot the hedges rather than riding up over them. This was immediately and spectacularly successful, and was widely copied throughout the Allied armies. A similar modification involved fixing a bulldozer blade to the Sherman.

In Normandy, too, the Division's tanks took to carrying 'consolidation stores' for the use of the accompanying infantry. In the immediate aftermath of capturing a terrain feature, the infantry were greatly aided in their rush to dig in solidly before the inevitable German counter-attack if the tanks carried extra picks, shovels, sandbags, rolls of barbed wire, food and water.

The tanks were also modified to meet local conditions on the drive for the Ruhr River. It was

late autumn, and the attack would involve crossing extremely waterlogged terrain. 'Duckbill' extenders fitted to the ends of the track plates, to spread the weight over a larger area and reduce ground pressure, proved only marginally effective for the medium tanks, and were almost useless for the light tanks with their narrower tracks. In order to prevent the tanks from sinking into the mire and staying there for the rest of the war, it was decided to fix logs, some nine feet long by four or six inches thick, to the vehicles to increase flotation. In the event this proved an unnecessary modification, as most of the tanks could and did get through the mud in low gear; 'duckbills' and logs were thereupon abandoned.

Finally, it should be mentioned that wartime photographs show a wide variety of attempts to provide Shermans, including those of the 2nd Armored Division, with extra protection—both to provide an improvised form of 'spaced armour' against the various hollow-charge weapons employed by the enemy late in the war, and to cut down the penetration of German shells by sheer bulk of armour. Appliqué armour plates welded to the hull sides and turret cheeks opposite the ammunition racks were a common feature of both British and US Shermans. In addition, units added anything that was handy, from spare bogies and hatch covers lashed or spot-welded at sensitive points, to elaborate cradles to hold extra 'skins' of sandbags and logs.

The Plates

A (Top) M1A1 command vehicle of Divisional Commander; Tennessee Manoeuvres, June 1941

The light tanks were termed 'combat cars' in cavalry service until shortly before this date, to conform with Congressional prohibition on any arm except the infantry operating tanks; by the late 1930s the distinction existed only on paper. Maj.-Gen. Patton's M1A1 underwent some changes in markings and insignia over a period of about a year; we take this painting from a series of colour photos of Patton's command during the Tennessee Manoeuvres published in *Life* magazine of 7 July that year. A plate bearing Patton's two general's stars is bolted to the front edge of the turret top centrally, and repeated as a tin 'pennant' rising from the inside edge of the right front trackguard. It is balanced on the left by one bearing the divisional insignia. No national star markings are carried on the vehicle. Armament is a .50 cal. and a .30 cal. machine gun independently mounted in turret mantlets, and an external pintle-mounted .30 cal. weapon.

A (Bottom) M2A4 tank, Company 'H', 66th Armored Regiment; Tennessee Manoeuvres, June 1941

For these important manoeuvres the force to which units belonged was indicated by coloured bands, either painted round the turrets or fixed as a cloth band. These bands were also to be seen

round helmets of personnel, in some cases. The tank is painted Olive Drab overall, with white serial and company and vehicle insignia on the hull sides and turret sides—in this case, the 'H-1' of the company commander, Company 'H'. A command pennant in tin is fixed to the inner edge of the left trackguard. This crew is refuelling from one of the jerrycans lashed to an improvised wooden rack at the hull rear; one pours while the other stands by with the fire extinguisher. They wear the one-piece Olive Drab (actually, light grey-green) herringbone twill overalls which had replaced the shirt, breeches and knee-boots worn in the vehicle by cavalry tankers until 1940. The second main version of the tanker's crash helmet is seen here; it came into use in 1940-41, and differed from the first pattern in having a 'doughnut' of padding all round the pierced skull at brow level. Helmets were of unpainted russet leather at this date. Officers not serving in vehicle crews still wore the Olive Drab shirt with 'pink' riding breeches and polished riding boots.

B (Top) M2 halftrack, 67th Armored Regiment; Sicily, July 1943

(An inaccurate interpretation of this vehicle, taken from a well-known photo, was published some years ago. The present illustration is based on closer examination but is still obscure in a couple of points.)

The vehicle is camouflaged with large, irregu-

The Division moves into the outskirts of Magdeburg, mid-April 1945.





Krefeld, Germany, March 1945: Shermans of the Division with heavy logs lashed along the hull sides, and green cheese-cloth material strung round the vehicle as camouflage. In the foreground, a heavily-loaded jeep, with its lowered windshield in a canvas cover marked with the star and circle.

lar areas of pinkish Desert Sand shade over the factory Olive Drab finish. A large stowage bin has been welded across the hull rear plate (in this model there was no rear hull door) and a smaller bin appears to have been added to the front right-hand fender; doubtless it was balanced by a second on the left fender. The tripod ground mounting for a .50 cal. machine gun, normally strapped to brackets across the rear hull bulkhead, has been moved to the right front mudguard and is strapped there, obscuring part of the serial on the hood side wall; this would, however, have begun with '40. . .'. Strapped to brackets on the hull side are the tubular steel hoops for the vehicle's canvas tilt. Below them, welded cargo racks carry spare road wheels. The halftrack is armed with no less than three machine guns on its all-round mounting rail, which surrounded the inner hull walls and cab just below the top edge: a .50 cal. at front centre and rear left corner, and a .30 cal. at right rear corner—although these were mounted on clamped slides and could be moved around the rail at will. The white national

stars have untypically wide rings. The unit designation appears on the short sections at the bottom corners of the rear hull plates; the '2 triangle' of the Division and '67 triangle' of the regiment on the left side, and the company letter followed by a short dash and the individual vehicle number on the right. In the photo on which this painting is based the company letter is unreadable—our 'B' is speculative.

B (Bottom) M8 armoured car, Company 'C', 82nd Reconnaissance Battalion; St. Lô area, Normandy, July 1944

A well-known vehicle, although previously illustrated with slightly incorrect markings, this M8 was photographed in combat during the St. Lô breakout. It was not a particularly popular type of vehicle: it lacked power at higher speeds, lacked heavy armour and overhead protection, had a radiator particularly vulnerable to small arms fire, lacked firepower and room to handle the armament comfortably, and placed the driver and co-driver in a position particularly vulnerable to mines. The other main mount of the 82nd Recon appears from photos to have been the faithful jeep, much strung-about with packs and bedrolls, and crewed by quartets of GIs heavily

armed with automatic weapons—as many as three BARs in a crew have been photographed.

The overall OD finish is enlivened by conventional divisional, battalion, company and vehicle identifications on the front and rear. A vehicle name starting with the company letter, *Colbert*, appears on the side of the rear mudguards, and the company letter and vehicle number are repeated in a large yellow presentation on front and rear mudguards. The serial is marked in white high on the side, between the mudguards.

We take the crew outfits from photographs. The normal summer dress appears to have been Olive Drab wool shirt and trousers worn with web belts and long gaiters, but the combination of tanker's windcheater and camouflage-printed trousers worn here is particularly interesting. Photos show that in this battalion in Normandy it was common to see the helmets camouflage-painted with dark green blotches over the faded OD, beneath the string foliage netting.

C (Top), M4A1 (76mm) Sherman of Co. 'G', 67th Armored Regiment; North-West Europe, 1944-45

It was quite normal to see the later Sherman modifications with the long 76mm gun in the T23 turret serving in the same troop alongside earlier marks; the supply of the new model was irregular, and commanders naturally tried to spread them among sabre squadrons to give a fair distribution of improved firepower, as the British did with the Sherman Firefly. This tank, taken from a photo which unfortunately lacks precise place and date evidence, displays three particularly interesting features. Firstly, the OD factory finish has been camouflaged with irregular streaks of Field Drab—the darker shade in the painting. This camouflage-painting in two shades was a most inconsistent feature, and was seen only in a relative minority of cases after D-Day. The terrain and crew clothing in the photo of this subject indicate late autumn or winter 1944. Secondly, the company letter and individual tank number are repeated in large yellow digits as

Krefeld, March 1945: infantrymen of Co. 'D' of the 41st move warily through the shattered streets.



a tactical identification, on both turret sides. This was another fairly uncommon practice, as Sherman crews were generally more concerned with denying Panzer gunners an aiming point than with declaring their identity to the world at large! Thirdly, in recognition of the frightening penetrative power of German weapons, the crew are constructing a complete skin of sandbags around the hull. Vertical iron brackets are welded to the hull, and horizontal foundations are provided by long pine-logs. A 'tunnel' has been left for the hull .30 cal., roofed with timber. Tracks are the rubber chevron type, with duckbill extenders for soft terrain. Note the small tin plates hung from the front log, bearing the unit identifications in conventional manner.

C (Bottom) M4A1 (75mm) Sherman of Co. D', 67th Armored Regiment; Ubach, Germany, November 1944

Coincidentally, also tank '11' of its company, this 75mm Sherman was photographed during the Ruhr River fighting. It is an absolutely typical example of the cast-hull M4A1 in a relatively clean front-line condition—though note the girder welded across the glacis as a base for exterior stowage of ration cartons, bedrolls, etc. This tank has appliqué armour plate, with its characteristic weld pattern, to protect the ammunition stowage in the side sponsons just behind the driver's and co-driver's positions; note, however, absence of appliqué plates on the turret cheeks. The markings are conventional on the hull front—division, regiment, company and individual identifications in small white stencils. National stars have been omitted or painted out, as providing too good an aiming point for the enemy. The serial is still visible, in yellow stencil—'USA' above '3036872'—on the rear hull sides. The name 'Double Dare-V' has been added in white capitals by the crew, on the appliqué plate.

D/E: Sherman tank interior views—the 'offices' in which the crews of the 2nd Armored Division's spearhead force fought their war:

D (top) shows the driver's position of an M4A3 Sherman. The instrument panel is set at a slant to his left. Centrally in front of the seat are the

clutch and throttle pedals, the track steering levers, and the periscope with its adjustment lever. At far right, rising diagonally, is the thin rod of the hand throttle. The two levers on the right of the seat are the gear change (forward) and the parking brake (rear). By the CO₂ extinguisher is a case of periscope spares and cleaning kit. A spare periscope box mounted on the wall left of the seat is used for small personal kit. The left sponson ammo rack holds fifteen 75mm rounds—three rows of four, and three in the bottom row. Displayed here, top to bottom, are rounds of HE; M89 Smoke; APC; and M64 White Phosphorus.

D (bottom) shows the co-driver/hull gunner's position; bins of tools and spare components fill the sponson. Empty .30 cal. shells are caught in the canvas bag. On the left are a compass mounted on the bulkhead, a flashlight, and, below, stowed in a shelf, the rubberized canvas hood and windshield which could be mounted over the open driver's hatch in foul weather. This item was rarely used.

E (top) shows the rear and left-hand side of an M4A2 Sherman turret, partly padded with coarse matting. At left are the SCR 258 radio, with stowed Thompson gun and magazines above, and spare valve case right. Centre is the pistol port, closed, and below and right of this two cases of rounds for the 2in smoke bomb thrower. The grip of the bomb thrower is visible top right, and behind it a case of six hand grenades. Twelve 75mm rounds could be clipped round the turret cage, arranged seven, three and two in the areas illustrated. We show, from left: six APC, three HE and, between the loader's stool and the CO₂ extinguisher, one M89 Smoke and one M64 White Phosphorus.

E (bottom) shows the right side and front of the turret, with the breech of the 75mm gun. Beyond it are the gunner's seat, and the commander's cupola. The gunner's periscope sight is stabilized to the gun by a slanting arm, and rises through the roof. Ahead of this is the black box of the recoil and stiffness adjuster. Left, beside the main gun stabilizer arm, is the grip of the 2in smoke bomb thrower. Below is the co-axial .30 cal. Browning, with ammunition feed box mounted in a slanted tray, and corrugated canvas spent-shell trunking below it. A vertical stack of



ammunition boxes is to the right of this trunking. Foreground, at turret ring level, is a rack of eight 75mm rounds.

An M8 self-propelled howitzer of HQ, 3.67th Armored, crosses the tracks at Palenberg, Germany. Full unit codes are marked on the glacis.

F: Major-General George S. Patton, commanding 2nd Armored Division, Tennessee Manoeuvres, June 1941

Mike Chappell's striking portrait of 'Ole Blood and Guts' shows him as he appears in the *Life* magazine colour spreads of July 1941. His personal interest in uniforms, and his attempts to get the Army to accept his proposals for tankers' combat dress are reflected in the many outfits which can be observed in photos of Patton. Here he is wearing what is probably a helmet of his own design; it displays interesting transitional features, midway between the russet leather 1938-style helmet with its narrow double line of brow padding and fairly tight outline, and the final wartime pattern of olive-painted leather. Note this helmet is a one-piece construction like a modern pilot's 'bone-dome', unlike all the official issue helmets, which had separate skulls and side/neck flaps of various materials and shapes. Patton is reputed to have pressed on the Army a design for a uniform with a gold-painted one-piece 'football helmet' like this one, and a green leather suit with a slanted, zipped plastron front. . . . The light 'Olive Drab' overall in grey-green herringbone twill, and the spiral-strapped boots, can be seen in the photo on page 9.

The national cypher appears on the collar of the shirt in brass and on the overall collar in white embroidery; the general's stars are worn on the shoulder-straps. At this time officers were required to wear the Division's patch—later moved to the left shoulder—on the left breast of overalls and field or tank jackets, as an identification aid. Patton wears his ivory-gripped, monogrammed .45 automatic in a shoulder-rig here; he alternated this with his general's waist-belt of leather with a circular gilt clasp.

The enamelled crests of the main combat regiments which made up the Division are illustrated on the left. On the Class A service dress and walking out uniform they were worn on shoulder-straps by officers, 'inboard' of ranking insignia, and on the lower lapels and left front of the overseas cap by enlisted men. These examples are identified on the colour plate.

G1: Corporal, 41st Infantry; Krefeld, Germany, March 1945

This veteran 'dog-face' was photographed during the last great advance of the 2nd Armored before the end of the war. Pattern 1943 combat clothing seems to have been a rarity among the Division's infantry right into 1945; examples are seen, but not too many. This NCO retains his light Olive



White flags, shocked civilians, and a single nonchalant GI: the end of the Third Reich is signalled in a scene repeated thousands of times all over Germany.

Drab (fawn) M1941 field jacket, but has acquired M1943 trousers in the characteristic green shade of OD. For warmth he wears them over wool service dress trousers, and rubber over-boots cover the russet leather combat boots; the 'rubbers' are fastened with metal clips. He has acquired a web pistol belt, on which personal equipment could be arranged more to personal taste than on the rifle belt. A .45 automatic was a sought-after non-regulation 'insurance' for infantrymen. The magazines for his Thompson SMG are carried in quadruple pouches just visible on the front of the belt. Apart from the entrenching spade and folded waterproof shelter quarter, the only other items carried in combat would be the first aid package and a canteen.

G2: Private first class, 66th Armored Regiment; Germany, winter 1944-45

There were several versions of the cloth 'flyer's helmet', differing in slight details of shape and closure; all had cheek flaps and a separate, long flap down the back of the neck. They were not very efficient, as they allowed water to run down the neck into the seat of the overalls! They are often seen in photos, however, worn for warmth

beneath the steel helmet or—less typically—the leather tanker's crash helmet. The woollen 'beanie' cap was more commonly worn with the tank helmet. This latter is the definitive wartime style, in olive-painted leather, with a pierced, domed skull and separate cheek and neck flaps held tight to the head by elastic straps and snap fasteners, and by a flexible metal spring covered in leather and pivoted to the sides of the skull, extending down over the earphone housings in the cheek pieces. Russet leather trim was visible round the edges of the skull and flaps, particularly on the cheek pieces. There was no chinstrap. Black earphone cables usually emerged horizontally behind each cheek piece, met off-centre at the back of the helmet, and fell in a single cable tipped with a jack-plug to about collar-bone level.

This crewman is muffled in the blanket-lined tanker's jacket (much sought after by infantrymen as well); the vehicle crew over-trousers, also blanket-lined and with bib front and shoulder braces; and the herringbone twill overalls. The divisional patch was worn on the left shoulder by many personnel in the front lines, although it was supposed to be removed for security purposes. Ranking, in light OD on midnight blue or black backing, was worn on both sleeves.

G3: Private, 17th Armored Engineer Battalion; Normandy, July 1944

In the Normandy *bocage* a small number of US troops received the camouflage-printed combat fatigues developed for the Pacific theatre of operations. They proved to be effective, but were—in the eyes of strained and naturally trigger-happy troops—disastrously similar to the combat dress of the *Waffen-SS* troops, who were often encountered in this campaign. After several tragedies they were generally withdrawn. This GI wears standard web rifle equipment and carries the M1 Garand .30 cal. self-loading rifle, standard weapon of the infantry and associated troops.

H (Top) M24 Chaffee of Co. 'A', 2nd Battalion, 66th Armored Regiment; Germany, February 1945

This company were certainly operating Chaffees in February, with infantry riding up front with the armoured 'point'. The overall whitewash snow camouflage and absence of all markings are speculative, but almost certain; photos of other

units with the M24 in that month and area show snow camouflage like this, and the 2nd Armored Division are most unlikely to have neglected this basic precaution.

H (Bottom) M26 Pershing (T26E3) of Co. 'E', 67th Armored Regiment; Germany, April 1945

This tank, taken from a photo and marked 'E-10' on the left lower corner of the glacis, was one of twenty-two early production Pershings which arrived with the Division at the beginning of April. The delivery convoy had to chase the Division with some determination before catching up with their rapid advance into the heart of the Reich. It is unclear whether the Pershings ever saw significant combat before hostilities ceased. Markings are entirely conventional, although the use of the yellow and black bridging plate below the divisional/regimental identity stencils shows that the war was virtually over; such 'trimmings' were ignored in combat as a rule.

President Harry S. Truman reviews men and light tanks of the 2nd Armored Division during the ceremony at which he presented the Presidential Unit Citation to Co. 'E', 17th Combat Engineers. Some PR-minded staff officer has had the name of the President's wife, Bess, painted on the half-track.



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Farbtafeln

A (oben) Kommandeurspanzer M1A1 des Generals Patton zur Zeit der 1941 Manöver in Tennessee; bemerkenswert sind die auf den 'Blechflächen' befindlichen Sterninsignien des Generals und die spezielle Farbstreifen am Panzerturn. **(unten)** Ein 'Beer' wurde vorläufig während dieser Manöver durch rote Streifen unten am Panzerturm gekennzeichnet. Bemerkenswert ist, dass ein Mitglied der Panzermannschaft mit Feuerlöscher bereitsteht während der andere den Tank mit Benzin nachfüllt. Die 'Fahne' und Turnnummer bezeichnen den Kommandeur der 'H' Company, 66th Armored Regiment.

B (oben) Der grobe Tarnanstrich von US 'Desert Sand' und 'Olive Drab', die aussergewöhnliche Grüsse der nationalen Sterninsignien, und die drei Maschinengewehr sind alle hier bemerkenswert. Einheitsidentitätssternen, die Division, Regiment, Kompanie und Einzelfahrzeug kennzeichnen werden hinten unten auf der Panzerwanne angebracht. **(unten)** Hier besteht die einzigen aussergewöhnlichen Markierungen sowohl aus dem mit der Kompaniebuchstabe anfangenden Namen als aus dem grossen, sich auf den Fahrzeugstabe befindlichen, gelben Kompanie- und Fahrzeugnummer ('Colbert' - 'C-30').

C (oben) Aussergewöhnlich hier sind die auf dem Panzerturm wiederholte Kompanie- und Fahrzeugnummer ('G-11'), der Tarnanstrich aus Farbstufen von 'Olive Drab' und 'Field Drab' und die Menge auf der Panzerwanne aufgehauener, mit angeschwemmten Eisensträgern und Holzlotzen befestigter Sandacke. **(unten)** Bemerkenswert ist die vorne an der Panzerwanne angebrachte Tragbohle, woran Kisten, Schlafrollen, Ersatzräder u.s.w., befestigt werden konnten. Die Panzermannschaft haben den Namen 'Double Dan V' auf die 'applique' Seitenpanzerplatte aufgetragen.

D (oben) Fahrstellung des Shermanpanzerfahrers. Hinten sieht man das Munitionsgestell worin sich das verschiedenartige Geschoss befindet: oben nach unten: Brianz, M89 Rauch-, panzerbrechende und M63 Phosphorgranaten. **(unten)** Stellung des Panzerwannenschützes und Beifahrers mit 30 cal. Maschinengewehr.

E (oben) Linke und hintere Innenwände des Shermanpanzerturms. Am 'Turnkorb' werden rings herum Radioapparat, Geschoss, 'pistol port' und der Abfeuerungshebel für die Rauchbomben festgemacht. **(unten)** Rechte und vordere Innenwände des Shermanpanzerturms mit 30 cal. gemeinschaftlich mit dem Hauptgeschütz verbundenem Maschinengewehr, Laderaum des 75mm Geschützes mit Schützenstellung und Kommandeureinstieg.

F Generalmajor George S. Patton im Jahre 1941; die Insignien der Hauptteilen seiner 2. Panzerdivision.

G1 Infanterist im Winter 1944-45; er trägt eine Feldjacke des 1941-, Hosen des 1943-Musters und minimal persönliche Gegenstände. Automatische Pistolen waren von Soldaten, die nicht dazu berechtigt waren, sehr begehrt, hauptsächlich als 'Versicherung' falls sie in Nahkampf gerieten. **G2** Hier wird die Panzermannschaftswindjacke offen geschildert, um die aus schwerem Stoff hergestellte Überhosen zu zeigen, der Helm wird ebenso in der Hand getragen, sodass der aus Tuch hergestellte, häufig bei kaltem Wetter darunter getragene 'Pilotenhelm' sichtbar wird. **G3** Diese Tarnuniform wurde während einer kurzen Zeit in Normandie ausgegeben - traurige Unfälle sind durch ihre Ähnlichkeit mit den Tarnblusen des Waffen-SS entstanden.

H (oben) Im Frühjahr 1945 sind mehrere Chaffee-panzer in die Division angelangt und wurden mit schneeweisem Anstrich getarnt. **(unten)** Genau 23 dieser schweren Panzer sind in die Division vor dem Ende des Krieges angekommen. Dieser wird nach einem Photo von April 1945 abgebildet; es ist unbekannt wie viel die Pershing-panzer vor VE-Tag eigentlich gekämpft haben.

Notes sur les planches en couleur

A (en haut) Le char de commandement M1A1 du Général Patton, lors des manœuvres au Tennessee en 1941; notez l'insigne d'un général, sous forme d'étoile, sur les 'drapaux' en métal, ainsi que les rayures spéciales de couleur sur la tourelle. **(en bas)** Des bandes temporaires rouges autour de la base de la tourelle identifiaient une 'armée' pendant ces manœuvres. Notez l'équipier qui se tient prêt avec un extincteur d'incendie pendant que l'autre fait le plein d'essence. Le 'drapeau' et le numéro sur la tourelle identifient le commandant de la Compagnie 'H', 66th Armored Regt.

B (en haut) Notez le camouflage grossier aux teintes de 'Desert Sand' et d'Olive Drab'; les proportions inhabituelles des étoiles formant l'insigne national; et les trois mitrailleuses. Les indicatifs, identifiant la division, le régiment, la compagnie et le véhicule, paraissent en bas et à l'arrière de la carrosserie. **(en bas)** Les marques sont un nom qui commence par la lettre de la compagnie et les grands numéros de la compagnie ainsi que du véhicule, qui sont peints sur les côtés ('Colbert' - 'C-30').

C (en haut) Des caractéristiques inhabituelles: les numéros de compagnie et de véhicule sont repris sur la tourelle ('G-11'); la peinture de camouflage dans des tons d'Olive Drab' et de 'Field Drab'; un grand nombre de sacs de sable rangés sur la carrosserie, maintenus en place par des supports en fer soudés et des tronçons de bois. **(en bas)** Notez la poutrelle qui a été soudée sur l'avant de la carrosserie afin d'y attacher des caisses, du matériel de couchage, des roues de rechange, etc. L'équipage a ajouté le nom 'Double Dan V' sur une plaque appliquée sur la cuirasse latérale.

D (en haut) Poste de pilote d'un char Sherman, ayant derrière lui un râtelier d'armes portant des obus des types suivants (de haut en bas): obus à haut explosif; obus fumigène à M89; obus perforant; obus M64 phosphoreux. **(en bas)** Poste du co-pilote/tireur, muni d'une mitrailleuse de calibre .30.

E (en haut) Parois gauche et arrière de la tourelle d'un char Sherman, avec du matériel de radio, des obus attachés autour de la 'corbeille' de la tourelle, le 'pistol port' et la poignée du lance-obus fumigène. **(en bas)** Parois droite et avant de la tourelle d'un char Sherman, avec une mitrailleuse co-axiale de calibre .30, la culasse d'un canon .75, le poste du tireur et la descente du chef de char.

F Le Major-Général George S. Patton, en 1941; et les insignes des principales unités de combat de sa 2nd Armored Division.

G1 Soldat d'infanterie portant la veste de combat de 1941, le pantalon de combat de 1943 et un minimum d'équipement personnel, l'hiver de 1944 à 1945. Les pistolets automatiques étaient très recherchés par les troupes, qui n'avaient pas le droit d'en porter, pour servir d'assurance en combat corps à corps. **G2** Le blouson coupe-vent de l'équipier de char est laissé ouvert pour montrer la salopette lourde en dessous, et le casque est ôté pour montrer le 'serre-tête de pilote' en tissu, qui était parfois porté en dessous par temps froid. **G3** L'uniforme de camouflage a été distribué pendant une courte période aux troupes en Normandie - sa similarité à la blouse de camouflage portée par les Waffen-SS était la cause d'accidents tragiques.

H (en haut) Un certain nombre de chars Chaffee étaient arrivés à la division au début de 1945 et ils étaient peints pour un camouflage dans la neige. **(en bas)** Seulement 23 de ces nouveaux chars lourds sont arrivés à la division avant la fin de la guerre. Celui-ci est dessiné d'après une photo prise en avril 1945; on ignore si les Pershing ont beaucoup engagé le combat avant le jour de la Libération en Europe.

A series of books describing the key units and weapons systems of the Second World War, prepared by leading military experts for the enthusiast and modeller, and illustrating authentic details of uniforms, insignia, armour and supporting vehicles, camouflage, markings and weapons.

Avec annotations en français sur les planches en couleur

Mit Aufzeichnungen auf deutsch über die Farbtafeln

1. British 7th Armoured Division
2. Panzer-Grenadier Division 'Grossdeutschland'
3. US 1st Infantry Division
4. Fallschirmpanzerdivision 'Hermann Göring'
5. US 101st Airborne Division
6. The Lee/Grant Tanks in British Service
7. 2nd SS Panzer Division 'Das Reich'
8. US 1st Marine Division
9. British Guards Armoured Division
10. Allied Tank Destroyers
11. US 2nd Armored Division
12. Sturmartillerie and Panzerjäger

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